



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,093	06/11/2001	Makoto Tomita	862.C2259	1307
5514	7590	12/15/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			SINGH, SATWANT K	
			ART UNIT	PAPER NUMBER
			2626	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/877,093

Applicant(s)

TOMITA, MAKOTO

Examiner

Satwant K. Singh

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9, 15, 24, 33, and 39 recite the limitation "the respective image and PDL modes" in lines 3 and 4 of the claim. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 10-12, 16-21, 25-30, and 34-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Momose et al (US 6,301,013).
5. Regarding Claim 1, Momose et al disclose a print control apparatus (printing control apparatus 10) for generating print data for a print device having a plurality of print modes, comprising: user interface means for causing a user to set a print setting item (drawing process unit 12) (col. 10, lines 45-51); first decision means for deciding

one of the plurality of print modes in accordance with an item set via said user interface means (plurality of options provided in the form of a pull-down menu as shown in Fig. 5) (col. 11, lines 31-35); and generation means for generating print data to be printed by the print device in the print mode decided by said first decision means (Fig. 3, S114) (printing device 2 translates the transferred control codes and carries out a required printing process) (col. 16, lines 18-28).

6. Regarding Claim 2, Momose et al disclose a print control apparatus, further comprising transmission means for transmitting the print data generated by said generation means to the print device (transfer process unit 17 transfers the control codes output from the printing management unit 11 to the printer device 2) (col. 10, lines 63-65).

7. Regarding Claim 3, Momose et al disclose a print control apparatus, wherein the apparatus further comprises second decision means for, when said first decision means does not decide one print mode, deciding a print mode in accordance with contents of print data to be printed, and when said second decision means decides the print mode, said transmission means transmits the print data to the print device in the print mode (host computer determines whether or not automatic sheet selection is carried out at step S102) (col. 11, lines 6-15).

8. Regarding Claim 4, Momose et al disclose a print control apparatus, wherein prior to decision of a print mode by said first and second decision means, said user interface means causes the user to select one of the plurality of print modes means (plurality of options provided in the form of a pull-down menu as shown in Fig. 5) (col.

Art Unit: 2626

11, lines 31-35) or an automatic mode in which one of the plurality of print modes is automatically decided (sheet information specified by the AP (applications program) or OS (operating system) is used) (col. 11, lines 6-15), and said first and second decision means decide one print mode when the automatic mode is selected (sheet information includes logic sheet information and printing sheet information and is specified according to the settings of print attribute information, which are informed in advance) (col. 11, lines 6-15).

9. Regarding Claim 5, Momose et al disclose a print control apparatus, wherein the item set via said user interface means includes an adjustment item for adjusting quality of an image to be printed (settings of the data input areas 41 through 44 are updated and the result of the updated settings on the resulting print) (col. 11, lines 62-67, col. 122, lines 1-9).

10. Regarding Claim 6, Momose et al disclose a print control apparatus, wherein the item set via said user interface means includes an edit item for editing an image to be printed (Fig. 3, S112) (data editing unit 16 edits the bit-map data based on the contents of a desired field in the print attribute table)(col. 15, lines 44-55).

11. Regarding Claim 10, Momose et al disclose a print control method of printing data by a print device having a plurality of print modes, comprising: a first decision step of deciding one of the plurality of print modes in accordance with a print setting item and value set by a user (plurality of options provided in the form of a pull-down menu as shown in Fig. 5) (col. 11, lines 31-35); and a transmission step of transmitting print data to the print device in the print mode decided in the first decision step (transfer process

Art Unit: 2626

unit 17 transfers the control codes output from the printing management unit 11 to the printer device 2) (col. 10, lines 63-65).

12. Claims 11, 18, and 27 are rejected for the same reason as Claim 3.

13. Claims 12, 19, and 28 are rejected for the same reason as Claim 4.

14. Claims 16 and 25 are rejected for the same reason as Claim 1.

15. Claims 17 and 26 are rejected for the same reason as Claim 2.

16. Claims 20 and 29 are rejected for the same reason as Claim 5.

17. Claims 21 and 30 are rejected for the same reason as Claim 6.

18. Regarding Claim 34, Momose et al disclose a print control apparatus for generating print data for a print device having a plurality of print modes, comprising: a user interface for causing a user to set a print setting item (plurality of options provided in the form of a pull-down menu as shown in Fig. 5) (col. 11, lines 31-35); and a printer driver (printing management unit 11) for deciding a print mode when one print mode can be decided based on the item set via said user interface (printing management unit 11 carries out the comprehensive printing control in the print control apparatus 10) (col. 10, lines 38-44).

19. Regarding Claim 35, Momose et al disclose a print control apparatus, further comprising a despooler (spool file 14) for, when said printer driver does not decide one print mode, despooling spooled print data and deciding a print mode in accordance with contents of the print data (Fig. 3, S110) (after the spool of all the print data has been conclude at step S110, the CPU 1a successfully reads the print data from the spool file 14 and generates bit-map data) (col. 15, lines 37-47).

Art Unit: 2626

20. Regarding Claim 36, Momose et al disclose a print control apparatus, wherein said printer driver and said despooler generate print data in different print modes plurality of options provided in the form of a pull-down menu as shown in Fig. 5) (col. 11, lines 31-35).

21. Regarding Claim 37, Momose et al disclose a print control apparatus, wherein prior to decision of a print mode by said printer driver and said despooler, said user interface causes the user to select one of the plurality of print modes (plurality of options provided in the form of a pull-down menu as shown in Fig. 5) (col. 11, lines 31-35) or an automatic mode (sheet information specified by the AP (applications program) or OS (operating system) is used) (col. 11, lines 6-15) in which a print mode is automatically decided, and said printer driver and said despooler decide a print mode when the automatic mode is selected (sheet information includes logic sheet information and printing sheet information and is specified according to the settings of print attribute information, which are informed in advance) (col. 11, lines 6-15).

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. Claims 7, 13, 22, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Momose et al. in view of Imai (US 6,639,688).

24. Regarding Claim 7, Momose et al fail to teach a print control apparatus, wherein the plurality of print modes include an image mode in which the print device receives and prints image data, and when the adjustment item is set via said user interface means, said first decision means decides the image mode as a print mode.

Imai teaches a print control apparatus, wherein the plurality of print modes include an image mode in which the print device receives and prints image data, and when the adjustment item is set via said user interface means, said first decision means decides the image mode as a print mode (print-mode select process 41 selects one of an image mode for printing image data including the common image 5 and a text mode for printing text data containing only the individual information 6) (col. 8, lines 5-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Momose with the teaching of Imai to include an image mode as one of the plurality of print modes for when a user needs to print image data for optimal printing.

25. Claims 13, 22, and 31 are rejected for the same reason as claim 7.

26. Claims 8, 14, 23, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Momose et al. in view of Kurozasa (US 6,614,546).

27. Regarding Claim 8, Momose et al fail to teach a print control apparatus, wherein the plurality of print modes include a PDL mode in which the print device receives a page description instruction, generates an image, and prints the image, and when the edit item is set via said user interface means, said first decision means decides the PDL mode as a print mode.

Kurozasa teaches a print control apparatus, wherein the plurality of print modes include a PDL mode in which the print device receives a page description instruction, generates an image, and prints the image, and when the edit item is set via said user interface means, said first decision means decides the PDL mode as a print mode (PDL mode which can be set by PDL printer driver is a mode setting an image printing area on paper, selecting the paper size, selecting paper direction, selecting image magnification, etc.) (col. 3, lines 38-44).

Therefore it would have been obvious to one of ordinary skill at the time of the invention to have combined the teachings of Momose with the teaching of Kurozasa to include a PDL mode as one of the plurality of print modes since the sheet selecting dialog box is performing the same function as a PDL print mode (Fig. 3, S103, Figs. 4-10) for optimal printing.

28. Claims 14, 23, and 32 are rejected for the same reason as claim 8.

29. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Momose et al. in view Morikawa (US 2001/0012124).

30. Regarding Claim 9, Momose et al fail to teach a print control apparatus, wherein said second decision means calculates data amounts of print data to be transmitted to the print device in the respective image and PDL modes, and decides a mode exhibiting a small data amount as a print mode.

Morikawa teaches a print control apparatus, wherein said second decision means calculates data amounts of print data to be transmitted to the print device, and decides a mode exhibiting a small data amount as a print mode (optional print mode is

Art Unit: 2626

automatically determined and displayed depending on the frame size of the image data)
(page 6, lines 1-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Momose with the teaching of Morikawa to use the size of the print data to determine the print mode for optimal printing.

31. Claims 15, 24, 33, and 39 are rejected for the same reason as claim 9.

32. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Momose et al. in view of Imai (US 6, 639,688) and Kurozasa (US 6, 614, 546).

33. Regarding Claim 38, Momose et al teach a print control apparatus, wherein said user interface includes as the item set by the user an adjustment item for adjusting quality of an image to be printed (settings of the data input areas 41 though 44 are updated and the result of the updated settings on the resulting print) (col. 11, lines 62-67, col. 122, lines 1-9), and an edit item for editing an image to be printed (Fig. 3, S112) (data editing unit 16 edits the bit-map data based on the contents of a desired field in the print attribute table)(col. 15, lines 44-55).

Momose et al fail to teach a print control apparatus, wherein when the adjustment item is set, said printer driver decides as a print mode an image mode in which the print device receives and prints image data, and when the edit item is set, decides as a print mode-a PDL mode in which the print device receives a page description instruction and prints an image.

Art Unit: 2626

Imai teaches a print control apparatus, wherein when the adjustment item is set, said printer driver decides as a print mode an image mode in which the print device receives and prints image data (print-mode select process 41 selects one of an image mode for printing image data including the common image 5 and a text mode for printing text data containing only the individual information 6) (col. 8, lines 5-13).

Kurozasa teaches a print control apparatus, wherein when the edit item is set, decides as a print mode-a PDL mode in which the print device receives a page description instruction and prints an image PDL mode which can be set by PDL printer driver is a mode setting an image printing area on paper, selecting the paper size, selecting paper direction, selecting image magnification, etc.) (col. 3, lines 38-44).

Therefore it would have been obvious to one of ordinary skill in the art to have combined the teachings of Momose with the teachings of Imai and Kurozasa to allow a printer driver having more than one mode setting to include both image data mode and PDL data mode for optimal printing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satwant K. Singh whose telephone number is (703) 306-3430. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on (703) 305-4863. The fax phone

Art Unit: 2626

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Satwant Singh
sks

Satwant K. Singh
Examiner
Art Unit 2626

KA Williams
KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER